November 2, 2005

TOPIC: GENERIC SAFETY ISSUE 191, "ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE"

INDUSTRY: NUCLEAR ENERGY INSTITUTE, INC. (NEI)
NUCLEAR PLANT LICENSEES

SUBJECT: SUMMARY OF MEETING ON SEPTEMBER 30, 2005, TO DISCUSS GSI-191 CHEMICAL EFFECTS HEAD LOSS INFORMATION

On September 30, 2005, members of the Nuclear Regulatory Commission (NRC) staff met with industry at Two White Flint North, Rockville, MD. The purpose of the meeting was to discuss GSI-191 chemical effects head loss information. The meeting was noticed on September 15, 2005 (ADAMS ML052580580). The meeting was a Category 2 public meeting and Public Meeting Feedback forms were available at the meeting. Enclosed is a list of attendees. The slides presented at the meeting are in ADAMS at ML052780415. Additionally, copies of NRC Information Notice (IN) 2005-26, "Results of Chemical Effects Head Loss Tests in a Simulated PWR Sump Pool Environment" dated September 16, 2005 (ADAMS ML052590327), were available.

The first speaker was Brian Sheron, NRC. Mr. Sheron briefly discussed the history of chemical effects and the discussion of chemical effects in the licensee responses to Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." As stated on a presentation slide and stated by Mr. Sheron, "Preliminary [NRC] staff reviews indicate that submittals are not adequate with respect to chemical effects/head loss." He then indicated that the staff needs more information on industry plans for testing and evaluation of chemical effects. The information contained in IN 2005-26 concerning the recent Argonne National Laboratory (ANL) tests showing significant head loss from calcium phosphate precipitate was then discussed. The staff stated that the 8 to 9 plants that have both tri-sodium phosphate (TSP) and Calcium-Silicate (CalSil) insulation inside containment are expected to address the recent test information. In the second presentation, the NRC staff made a more detailed presentation concerning IN 2005-26.

During their presentations, industry discussed immediate actions taken by the plants with TSP and CalSil inside containment. Industry stated that the TSP/CalSil plants will docket responses by November 30, 2005, describing the actions taken. Industry also discussed an assessment of the applicability of the ANL test results in their presentation. The ANL test conditions were based on data provided to the NRC staff by industry and industry stated that the ANL tests provided valuable data on TSP/CalSil conditions. In response to the staff's comment that the test conditions were based on industry provided data, industry stated that they had recently determined the CalSil loading to be less than previously communicated to the NRC and, therefore, the conditions tested were too conservative.

Industry presented a four-phase approach to resolution of chemical effects on head loss uncertainty. The four phases are: 1) Individual plant assessment, 2) Supplemental small-scale testing, 3) development of generic chemical effects algorithms, and 4) plant-specific testing as required. Industry presented their schedule for supplemental testing to address TSP/CalSil interaction. The schedule is to have a test plan for review by October 30, adopt a final test plan by November 15, 2005, and complete initial test reports by February 15, 2006. Industry concluded that industry activities were underway to comprehensively address chemical effects.

At the end of their presentation, industry recommended that a more holistic approach be taken for resolution of GSI-191. When asked by the NRC staff to describe their proposal for a holistic approach, the industry did not have a proposal.

The meeting concluded with NRC agreeing to meet with industry to discuss their test plan.

Please direct any inquiries to Jon B. Hopkins at 301-415-3027, or JBH1@nrc.gov.

Sincerely,

/RA/

Jon B. Hopkins, Senior Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Enclosure: Attendance list

cc w/encl: See next page

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Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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ATTENDEES

NRC MEETING WITH INDUSTRY

SEPTEMBER 30, 2005

NRC

T. Martin
B. Sheron
R. Barrett
J. Hopkins
P. Klein
M. Evans
J. Hannon
M. Kowal
M. Yoder
R. Reyes
J. Lehning
D. Solorio
S. Unikewicz
W. Bateman
L. Lund
F. Eltawila
S. Lu
R. Tregoning
L. Whitney
R. Architzel
H. Wagage
L. Lois
J. Eads
S. Bajorek
K. Karwoski
J. Davis
C. Jackson
G. Suber
R. Caruso (ACRS)

INDUSTRY

J. Butler, NEI
T. Andreychec, Westinghouse
M. Dingler, Westinghouse
T. Pietrangelo, NEI
J. Gisclon, EPRI
L. Williams, Areva-Framatome
D. Rochester, Duke Power/NGO
J. Mokos, Alion
A. Smith, Enercon
D. Shih, Entergy
A. Irani, Entergy
S. Khan, Entergy
M. Kai, Dominion
R. Waters, Entergy
T. Bacon, Areva-Framatome
M. Kostelnik, Constellation
A. Drake, Constellation
G. Vine, EPRI
P. Leonard, AEP
A. Byers, Westinghouse
C. Brinkman, Westinghouse
A. Bilanin, Continuum Dynamics

INDUSTRY

G. Stramback, GE
S. Moen, GE
A. Ricker, Proto-Power
M. Gillman, TVA
A. K. Singh, S&L
T. Engbuing, APS
W. Rinkacs, Westinghouse
B. Taylor, AECL
L. Qiu, AECL
J. Metcalf, Polestar
J. Broschak, NMC
J. Wong, NMC
M. Friedman, OPPD
J. Gasper, OPPD
D. Beck, CCI
S. Cain, Alden Lab.
A. Wyche, SERCH/Bechtel
P. Mast, Alion
B. Dunn, FPL
R. Wilferd, STARS
K. Kishioka, Japan Power
T. Yamada, INES

PUBLIC

S. Black

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